

Quarterly Status Report for the period  
October 1, 1964 to December 31, 1964

on  
NASA Contract R-09-022-029

N65-82271

*Code Name*

*Nasa CR 60920*

Accomplishments made on this Project for the period of October 1, 1964 to December 31, 1964 may be outlined as follows:

(1) The literature, as recorded in Chemical Abstracts, on the electrolytic conductivity, transference numbers, and ionic mobilities of electrolytes in aqueous, nonaqueous, and molten salt systems was reviewed for the period of 1937 to 1950, inclusive. Data were collected but not critically evaluated.

(2) The literature, as recorded in Chemical Abstracts, on the activities and activity coefficients of electrolytes in aqueous, nonaqueous, and molten salt systems was reviewed for the period from 1959 to 1963, inclusive. Data were collected but not critically evaluated.

(3) The literature, as recorded in Chemical Abstracts, on the electromotive forces (and electrode potentials) of galvanic cells made with aqueous, nonaqueous, and molten salt systems was reviewed, but not critically evaluated, for the period from 1959 to 1963, inclusive.

(4) The Debye-Hückel limiting-law values for the activity coefficients of uni-univalent electrolytes were evaluated for ionic strengths of 0.0001 to 0.1 and at temperatures of 0, 5, 10, 15, 18, 20, 25, 30, 35, 38, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, and 100° Celsius.

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